

statutory requirement for patentability, but only to claim certain embodiments of the invention which are described in the specification. The support for new Claims 35 and 36 can be found in Figures 4, 5a, 5b, 6 and 7. The support for new Claims 37 and 38 is found in Figures 4, 5a, 5b, 6 and 7 and at Page 4, in the first sentence of Paragraph 15. The support for new Claim 39 is found in original Claims 1 and 18, at paragraph 6 of Page 2, in the second sentence of paragraph 15 on Page 4, and in Figures 4, 5a, 5b, 6 and 7. The support for new Claims 40 and 41 is found in the second sentence of paragraph 15 on Page 4. The support for Claims 42 and 43 is found in original Claims 10, 11, 12, 27, 28 and 29.

In the Office Action, the Examiner made the following rejections:

Claims 1, 2, 7, 10, 18, 19, 24, and 27 were rejected under 35 U.S.C §102 as being anticipated by U.S. 5,758,990 to Davies et al. ("Davies");

Claims 3 and 20 were rejected under 35 U.S.C §103 as being obvious over Davies in view of U.S. 4,477,207 to Johnson ("Johnson");

Claims 4-6, 8, 9, 21-23, 25 and 26 were rejected under 35 U.S.C §103 as being obvious over Davies in view of U.S. 4,330,140 to Hampton ("Hampton");

Claims 11, 12, 28 and 29 were rejected under 35 U.S.C §103 as being obvious over Davies in view of U.S. 5,477,392 to Marshall ("Marshall");

Claims 13-15 and 30-32 were rejected under 35 U.S.C §103 as being obvious over Davies in view of U.S. 6,371,697 to Huang et al. ("Huang"); and

Claims 16, 17, 33 and 34 were rejected under 35 U.S.C §103 as being obvious over Davies in view of U.S. 4,422,801 to Hale et al. ("Hale").

As claimed in Claim 1 and the claims that depend therefrom, the Applicants' invention includes:

- 1) A buoyancy apparatus for providing tension for an offshore riser comprising:
 - a) at least one buoyancy element; and

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- b) a frame comprising a plurality of vertical members externally disposed to said at least one buoyancy element and a plurality of connectors securing said vertical members to said riser.

The Applicants' invention, as claimed in Claim 1, therefore includes a buoyancy apparatus that includes at least one buoyancy element and a frame which includes two or more vertical members externally disposed to the at least one buoyancy element. Claim 18 contains the same language emphasized above. Therefore the Applicants' invention, as claimed in claims 1 and 18, includes a buoyancy apparatus where at least one buoyancy element of the buoyancy apparatus has two or more vertical frame members externally disposed to the at least one buoyancy element.

The Examiner asserts that the Applicants' invention, as claimed in independent Claims 1 and 18, is anticipated by Davies because, among other things, the Examiner asserts that Davies teaches "a frame comprising a plurality of vertical tubular members (14) externally disposed to the at least one buoyancy element (16)." However, Davies does not teach or suggest a buoyancy apparatus where a buoyancy element of the buoyancy apparatus has two or more vertical frame members externally disposed to the buoyancy element where the vertical frame members are secured to the riser. The figures of Davies depict only one external circular sleeve that is secured to the riser surrounding each buoyancy air can. See Figs. 1-5. Davies describes the following in the Summary of the Invention section at Column 1, Lines 61-62:

Each sleeve receives a variable buoyancy air can.

Therefore it is clear that at most Davies describes one sleeve externally disposed to one air can that is fastened to the riser stem and does not teach or fairly suggest a buoyancy apparatus that includes at least one buoyancy element and a frame, secured to the riser, which includes a plurality of vertical members externally disposed to the at least one buoyancy element.

None of the other five references cited in the First Office Action were cited as making any of the existing independent claims unpatentable, but only as making some of

the application's dependent claims obvious. Therefore the Applicants do not believe it necessary to address the various dependent claim rejections based on the references other than Davies after establishing the patentability of the independent claims over Davies. Therefore the Applicants' invention as claimed in Claims 1, 18, and the claims that depend therefrom is novel and non-obvious in view of Davies and the other five references cited in the First Office Action.

New Claim 39 is also not taught or suggested by Davies as Davies does not teach or suggest a buoyancy apparatus which includes a frame including a plurality of vertical members externally disposed to a buoyancy element where at least one of the plurality of vertical members extends the vertical length of the buoyancy element.

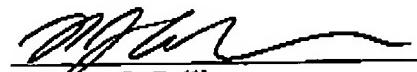
In the First Office Action the Examiner states that in considering the patentability of the claims under 35 U.S.C. 103(a), the Examiner has presumed that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Out of an abundance of caution the Applicants' wish for the Examiner to treat all the claims of the application as not commonly owned for the purposes of examination, including for the purpose of considering potential prior art under 35 U.S.C. 102(f) or (g).

The application is believed to be in condition for allowance. Applicants believe that the prior art does not teach or suggest, either alone or in combination, all the elements of independent Claims 1, 18 or 39. The dependent claims are also believed patentable since they depend on independent Claims 1, 18 or 39 for the reasons discussed above. Therefore, it is not believed necessary to discuss the Examiner's specific §102 or §103 rejections of the dependent claims in more detail. Applicants therefore respectfully request that this application be allowed and passed to issue.

If the Examiner wishes to discuss this application with counsel, please contact the undersigned.

Respectfully submitted,

Date: 5/5/03


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I hereby certify that this correspondence is being transmitted via facsimile to Examiner Jong-Suk Lee, Technology Center 3600, United States Patent and Trademark Office at (703) 872-9326 on May 5, 2003.

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